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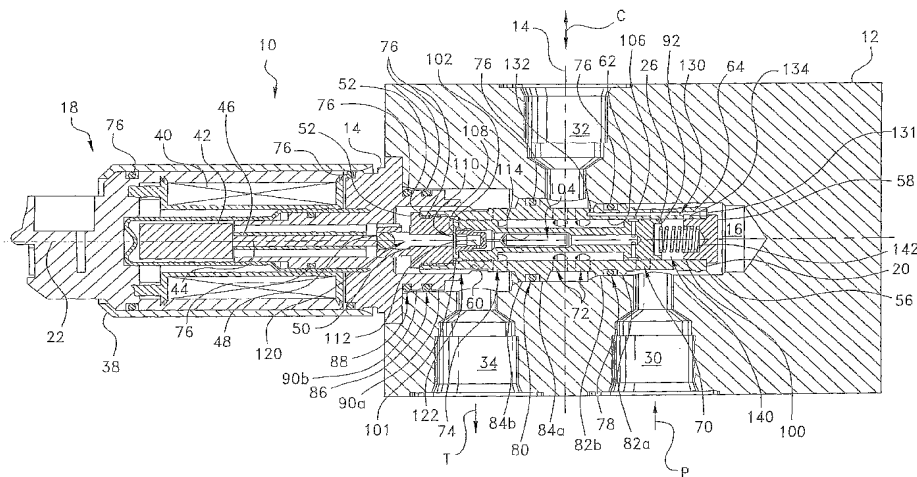
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(54) Title: PROPORTIONAL PRESSURE CONTROL VALVE



(57) Abstract: A proportional pressure control valve (10) particularly for electro-hydraulic transmissions. The valve includes a cage (20) having pump, clutch, and tank port openings (70, 72, 74). A spool (26) is received within the cage (20) for controlling flow between the clutch port (32) and the pump and tank ports (30, 34) of the system. The spool (26) has a feedback pressure surface (100) responsive to an applied feedback fluid pressure urging the spool (26) to move towards a first position allowing flow between the clutch and tank ports. A feedback pressure chamber is defined within the cage for developing the feedback fluid pressure. A clutch port pressure feedback passage (130) couples the clutch port (32) with the feedback pressure chamber for admitting flow from the clutch port (32) into the feedback pressure chamber to develop the feedback fluid pressure. The clutch port pressure feedback passage (130) is formed within the cage wall (60) to couple the control pressure chamber in fluid communication with the system clutch port (32).

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